REMARKS

Claim 9

Applicants respectfully point out that claim 9 was canceled on 21 November 2007. However, the final office action dated 13 April 2010 makes reference to a range of claims that incorporate claim 9. Applicants have recharacterized the rejections of the 13 April 2010 final office action as not applying to canceled claim 9.

Rejections under 35 U.S.C. § 112, first paragraph

Claims 1-8 and 10-22 have been rejected under 35 U.S.C. § 112, first paragraph, for allegedly failing to comply with the written description requirement. Applicants respectfully traverse.

The 13 April 2010 final office action alleges that the specification does not support amended Claims 1, 14 and 20 to include the phrase, "wherein the starch has been substituted with succinate." However, one skilled in the would recognize that substitution is a modification well-known the art and this amendment is fully supported throughout the Specification, but particularly by Example 1 and the two paragraphs in the Specification beginning on page 4, line 22 which are quoted below (emphasis added):

> --The starches of this invention are modified with succinic anhydride to provide the functionality. The reaction of succinic anhydride with starch is well known in the literature and can be accomplished in various reaction media. While treatment with any level of reagent will provide some performance in the final application, suitable starches will be treated with at least about 1%, particularly at least about 2.5% succinic anhydride, and no more than about 4% succinic anhydride.
>
> The starch may be further chemically modified, including without limitation, crosslinked, acetylated, organically esterified, hydroxyethylated, hydroxypropylated, phosphorylated, inorganically esterified, cationic, anionic, nonionic, and zwitterionic, and substituted succinate derivatives thereof. Such modifications are known in the art, for example in Modified Starches: Properties and Uses, Ed. Wurzburg, CRC Press, Inc., Florida (1986). One skilled in the art would recognize the ester linkage of the succinate would be labile under certain reaction conditions. Where optional derivatization is desired, it may be

necessary to alter the order of modification so as not to hydrolyze the succinate ester during further reaction (i.e. etherification).--

After consideration of this support, Applicants hereby respectfully request that the Examiner withdraw the rejection under 35 U.S.C. § 112, first paragraph at this time.

Rejections under 35 U.S.C. § 103(a) over Judkins et al. in view of Carver et al.

Claims 1-8 and 10-22 have been rejected under 35 U.S.C. § 103(a) as being allegedly unpatentable over Judkins et al. (US 6,033,697) in view of Carver et al. (6,777,015). Applicants respectfully traverse. Applicants respectfully point out that for rejections under 35 U.S.C. § 103(a), 35 U.S.C. § 103(a)(1) precludes the use of commonly owned 102(e) references, such as Carver et al.

Applicants respectfully submit that Carver et al. can only be considered as a prior art reference under 35 U.S.C. § 102(e). Carver et al. cannot be consider as a prior art reference under 35 U.S.C § 102(a) because the date of invention of the present invention is no later than 20 February 2003 as shown by the hereby submitted affidavit under 37 C.F.R. § 1.131. The publication of Carver et al. as patent publication US 2003-0039741 occurred on 27 February 2003, after the date of invention. Therefore, at the time of invention, Carver et al., could not be considered a prior art reference under 35 U.S.C § 102(a). Carver et al. can also not be consider a prior art reference under 35 U.S.C §§ 102(b) or (d) because the printed publication that describes the invention of Carver et al. was published on 27 February 2003 and the present invention was filed as Application Serial No.: 10/646,429 on 22 August 2003, less that 12 months after the publication of the invention of Carver et al. Therefore, Caver et al. can only be considered as a prior art reference under 35 U.S.C § 102(e).

It should be noted that the present invention and Carver et al. were owned by, or subject to an obligation of assignment to the same person, particularly National Starch and Chemical Investment Holding Corporation. The use of 102(e) references that are owned by, or subject to an obligation of

assignment to the same person is excluded by 35 U.S.C. § 103(a)(1). Accordingly, Carver et al. cannot be relied upon as a reference in combination with Judkins et al. under 35 U.S.C. § 103(a).

The rejection under 35 U.S.C. § 103(a) over Judkins et al. cannot stand without the teachings of Carver et al. According to the Examiner's statement in the 13 April 2010 final office action, "Judkins et al. do not disclose the starch is substituted with succinate ..." (*See* the 13 April 2010 final office action page 3, lines 3-4.) To make up for the deficiencies of Judkins, Carver et al. is relied upon to teach the claim limitation of "wherein the starch has been substituted with succinate." Without the teaching of Carver et al., the claimed the present invention as claimed in claims 1-8 and 10-22, is non-obvious under 35 U.S.C. § 103(a) over Judkins et al. Therefore, Applicants hereby respectfully request that the rejection of claims 1-8 and 10-22 under 35 U.S.C. § 103(a) as being unpatentable over Judkins et al. in view of Carver et al. be withdrawn at this time.

Rejections under 35 U.S.C. § 103(a) over Keijibets in view of Carver et al.

Claims 1-8 and 10-20 have been rejected under 35 U.S.C. § 103(a) as being allegedly unpatentable over Keijibets (US 6,635,294) in view of Carver et al. (6,777,015). Applicants respectfully traverse. For the reasons stated above, the applicant particularly point out that Carver et al. cannot be relied upon as a reference under 35 U.S.C. 103(a).

Keijibets cannot support a rejection of the present invention under 35 U.S.C. § 103(a) without being supported by the teachings of Carver et al. Therefore, Applicants hereby respectfully request that the rejection of claims 1-8 and 10-20 under 35 U.S.C. § 103(a) as being unpatentable over Keijibets et al. in view of Carver et al. be withdrawn at this time.

Rejections under 35 U.S.C. § 103(a) over Shi, et al.

Claims 1, 2 and 7 have been rejected under 35 U.S.C. § 103(a) as being allegedly patentable over Shi, et al. (US 2003/0099744). Applicants traverse.

Applicants respectfully point out that for rejections under 35 U.S.C. § 103(a), 35 U.S.C. § 103(a)(1) precludes the use of commonly owned 102(e) references, such as Shi, et al.

Applicants respectfully submit that Shi et al. can only be considered as a prior art reference under 35 U.S.C. § 102(e). Shi et al. cannot be consider as a prior art reference under 35 U.S.C § 102(a) because the date of invention of the present invention is no later than 20 February 2003 as shown by the hereby submitted affidavit under 37 C.F.R. § 1.131. The publication of Shi et al. as patent publication US 2003-0099744 occurred on 29 May 2003, after the date of invention. Therefore, at the time of invention, Shi et al., could not be considered a prior art reference under 35 U.S.C § 102(a). Shi et al. can also not be consider a prior art reference under 35 U.S.C §§ 102(b) or (d) because the printed publication that describes the invention of Shi et al. was published on 29 May 2003, and the present invention was filed as Application Serial No.: 10/646,429 on 22 August 2003, less that 12 months after the publication of the invention of Shi et al. Therefore, Shi et al. can only be considered as a prior art reference under 35 U.S.C § 102(e).

It should be noted that the present invention and Shi et al. were owned by, or subject to an obligation of assignment to the same person, particularly National Starch and Chemical Investment Holding Corporation. The use of 102(e) references that are owned by, or subject to an obligation of assignment to the same person is excluded by 35 U.S.C. § 103(a)(1). Accordingly, Shi et al. cannot be relied upon as a reference in under 35 U.S.C. 103(a). Applicants hereby respectfully request that the rejection of claims 1, 2 and 7 under 35 U.S.C. § 103(a) as being unpatentable over Shi et al. be withdrawn at this time.

Conclusion

In view of the foregoing, Applicants submit the Application is now in condition for allowance and respectfully requests early notice to that effect. Election by the Applicants not to address each and every statement made by the Examiner does not imply agreement with any unaddressed statement.

It is believed that that no fee is due in connection with the filing of this response. However, if the commissioner believes otherwise, he is hereby authorized to charge such fee to the Applicants' Deposit Account: 14-0455.

Respectfully submitted,

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